

ABSTRACT OF THE DISCLOSURE

The differential expression of marker proteins in a targeted population provides a means of identifying and isolating cells. A population of cells associated with the regeneration of pancreatic islets is shown to express certain proteins, including the cell surface proteins ErbB2, 5 ErbB3, and ErbB4; and the nuclear protein Msx-2. Populations of isolated pancreatic islet progenitor cells find use in screening assays, to characterize genes involved in islet development and regulation, and in transplantation to provide a recipient with pancreatic islet functions.